THE NATURAL DIVIDING LINE BETWEEN THE MIDDLE AND SOUTHERN URALS

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A survey of a great number of different source materials in which the dividing line between the Middle (Srednly) and Southern (Yuzhniy) Urals is mentioned or discussed reveals that it is invariably located in the latitude of Yurma Mountain. There is no suggestion that the dividing line may be elsewhere. At present, there is no need to dispute the correctness of the existing practice of dividing the area into Middle and Southern Urals, but it is altogether in order to inquire to what extent the location of the dividing line as accepted up to now corresponds with natural and historical facts and to what extent the line possesses delimitative characteristics. From this point of view, some of the natural characteristics of the dividing line are now briefly described.

1. As is known, mountainous terrain is a characteristic feature of the western slope of the Southern Urals, and it is on this feature that the existing division is based. The assumption of a dividing line between the Middle and Southern Urals in the latitude of Yurma Mountain is usually based on the proposition of A. Gumbol'dt that Yurma Mountain represents a mountain junction, south of which the Southern Ural Range begins.

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It is hardly necessary to point out now that this proposition is incorrect since the terrain of this region has by this time been exactly determined by instrument; in fact, the falsity of the premise was demonstrated as far back as 1883 by A. P. Karpinskiy.

If Yurma Mountain does not represent the northern end of the Southern Ural Range but is merely one of the peaks of the range, then the question naturally arises where and how does this singular morphological complex begin?

To answer this question, it is best to turn to the pages of a large-scale topographical map where it is unmistakably clear that the Southern Ural Range begins on the left bank of the Ufa River directly south of the latitude of Nizhniy Ufaley. The terrain there immediately takes on a typically mountainous character. The peaks of Kurma Mountain and Sova Mountain are 720.1 and 750.1 meters high, respectively. The mountain slopes are covered with rock waste and rock slides. The rivers which flow in the mountain valleys have steep banks. In contrast to this, the region on the right bank of the Ufa River is an almost level region. The abruptness of change in the two kinds of terrain which are separated from each other by the valley of the Ufa river is particularly evident when seen from a plane flying west from Nizhniy Ufaley.

2. Geological structure is found to be in complete harmony with the terrain. Early pre-Cambrian rocks which are characteristic of the Southern Urals extend north beyond the latitudinal course of the Ufa. The right bank of the Ufa is composed of Middle Paleozoic limestones. North of Yurma Mountain, there are outcrops of metamorphosed rocks, consisting of various kinds of gneisses, among which there are sheet-like layers of iron quartz which are completely similar in structure and mineralogical composition to the magnetic quartz rocks of the Kola Peninsula.

Therefore, the northern limit of the early strata widely developed in the Southern Urals lies somewhat southward from the latitude of Nizhniy Ufaley.

3. The ground cover of the Southern Urals is quite well known from the works of I. M. Krasheninnikov. It appears from these works that the ground cover of the Southern Urals is considerably more diversified than that of the Middle Urals. Vertical zonation of vegetation is well developed in the Southern Urals and is one of the outstanding characteristics of that region. The question now is to determine to what extent a change in vegetation confirms the location of the dividing line between the Southern and Middle Urals is at the point the author suggests.

On Kurma Mountain, larch forests were observed below the subalpine zone. The foothills and western slopes of the Urals at this latitude, as pointed out in the literature on this region, are covered with mixed forests of coniferous and deciduous trees, the latter consisting of elm, maple, and oak.

Thick undergrowth of steppe cherry and feather grass grows in the flat regions and along the upper courses of the B. IK and Vaselga rivers. Kok-sagyz is being successfully grown in these regions.

Even the very limited indications given show that the characteristic clearly-defined vertical zonation of the Southern Urals continues up to the latitude of Nizhniy Ufaley. However, this floral pattern was not observed by any researcher farther north.

4. Since the natural dividing line in the eastern part of the range is not defined in the materials of individual observers, it is obvious that the boundary there is not as clearly expressed as in the western and central parts of the range. However, basing a decision on the three criteria of terrain, geological structure, and ground cover, it seems that the most natural location of the boundary would be in the latitude of the northern limits of the Vishnevyye Mountains.

A certain amount of discrepancy in the latitudes of the dividing line on the western and eastern slopes of the range should not confuse us, since the discussion concerns the location of the natural and not the artificial, conventional dividing line.

Admitting a certain degree of error from actual conditions, but reducing the degree of error of past practice, it is possible to draw the dividing line on both slopes of the Urals along a parallel passing through Nizhniy Ufaley, which is 55 degrees 54 minutes north latitude.

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The following information on limestone and dolomite was found in captured German documents:

Poland:

In 1937 about 1.2 million tons of crude limestone and 340,000 tons of crude dolomite were produced. The processing industries produced the following:

765,000 tons of [redacted] quicklime

5,000 tons of hydraulic limestone

20,000 tons of lime fertilizer

60,000 tons of burnt dolomite.

The limestone industry was able to cover all requirements for building and for industry.

Imports of limestone and dolomite amounted to only 25,000 tons. However, Poland furnished Germany with considerable quantities of dolomite and quicklime annually (1938: 445,000 zlotys).

Report by Reich Office for Wartime Economic Planning, on Polish mining and industry.

Yugoslavia:

	1936	1937	1938	1939
Production	Data not available			
Imports (tons)	1,009	2	1,937	1,674
Exports (tons)	238	223	103	174
Consumption	Data not available			

Report on "Economic Structure of Yugoslavia"
GMDS No. Wi/103.28